

The impact of irrigation on regional development in the GAP.

An Overview

Dursun Yıldız

C.E Hydropolitics Expert (M.Sc.)

Hydropolitics Association,

Ankara-Türkiye

1.Introduction

South Easter Anatolian Project (GAP) is Türkiye's largest regional development project, which has slowed down but has not been interrupted despite all the difficulties. Recent political developments in Syria have increased the economic and strategic importance of GAP. We must consider the new geopolitical situation in the region and complete this project with both protection and a new understanding.

GAP was discussed at the Economy Coordination Board held in Şanlıurfa on December 29, 2024, under the chairmanship of Vice President Cevdet Yılmaz. In the statement, it was stated that the impact of GAP on regional development should be increased and that efforts to make agriculture the driving force in this process will be accelerated. This statement reiterated the impact of GAP on regional development and the importance of agriculture being the driving force in this process. Has the agricultural sector in the GAP, which is expected to contribute significantly to the national development goals, been a sufficient driving force in realizing the development of the region at this point? What is the current socio-economic situation of the region? In this article, we tried to examine the issue within this framework.





Figure 1. GAP Region and Provinces

2.GAP Project

GAP, which was planned in the 1970s but actual construction started in 1988; It covers the provinces of Adıyaman, Batman, Diyarbakır, Gaziantep, Kilis, Mardin, Siirt, Şanlıurfa and Şırnak (Figure 1). At the time it was built, GAP was introduced as one of the 9 biggest projects of the world. GAP was planned as the sum of 13 project packages for irrigation and hydroelectric energy production in the Euphrates-Tigris basin, and within this scope, the construction of 22 dams, 19 hydroelectric power plants and an irrigation network in an area of approximately 1.8 million hectares was envisaged. According to the 1989-2005 GAP Master Plan, it was announced that the construction of the GAP, which started in 1988, would be largely completed in the early 2000s and would be fully completed in 2010.

GAP is a water-based integrated regional development project. The physical completion rate of energy projects is approximately 92%, and approximately two-thirds of the planned area in the Action Plan has been opened for irrigation.

GAP's general development goals include ensuring regional development, eliminating interregional differences, improving economic and social conditions in the region, and increasing the welfare level and living standards of the local people. GAP aims at the economic, social, and social development of the region and indirectly serves the national development of Turkey. It is planned to reduce inter-regional and intra-regional inequality and accelerate socio-economic development by increasing the area opened for irrigation in the GAP.

GAP aims to improve the living standards of those engaged in agricultural activities in the region by developing agricultural enterprises and therefore agricultural production methods and techniques through large-scale irrigation projects. The basic development strategy of the GAP Master Plan is to turn the region into an agriculture-based export region. In this context:

- To develop and manage water and land resources for both irrigation and urban and industrial use purposes,
- Improving land use by applying better agricultural business management, agricultural practices, and plant patterns,
- To encourage manufacturing industries by giving special emphasis to production related to agriculture and based on local resources,
- The main goals are to improve social services and urban infrastructure to better meet the needs of the local people, attract qualified personnel to the region, and ensure that they remain in the region (2).

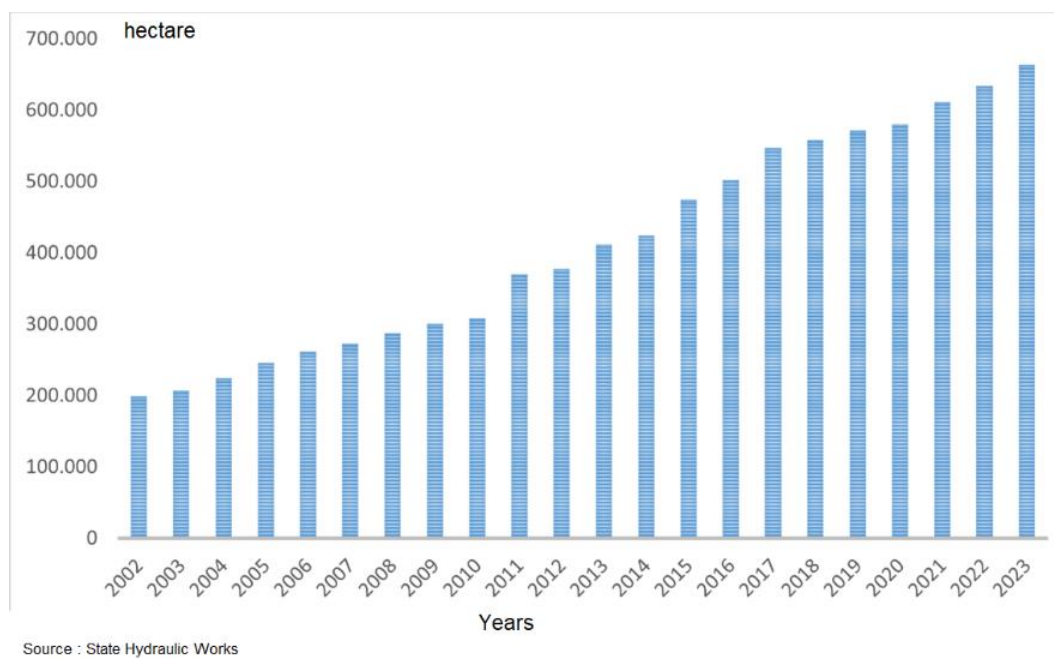


Figure2. Development of irrigated land by years

3.Irrigation Progress

As shown in Figure 2, continuous progress has been made with the gradual commissioning of irrigation projects in the GAP, but the planned socio-economical results have not been fully achieved. Although the area opened for irrigation has reached 680,000 hectares as of 2024 December, product diversity and the parallel development of agriculture-based industry and value-added production have not been achieved sufficiently. Agriculture-industry-commerce integration has not been fully achieved. This necessitates a renewal of our perspective on GAP.



4.Development within the region is uneven.

The developments in the manufacturing industry and employment in the region have mostly occurred in the provinces of Gaziantep, Şanlıurfa, and Diyarbakır, and the spread of this development to the other 6 provinces is delayed. The positive impact of the Project on income distribution within the region has not been realized sufficiently. With the integration of agriculture, industry, and trade in the region; Sufficient progress has not been made in creating a large market, increasing trade, making manufacturing industry production more efficient, creating a brand and increasing competitiveness in the foreign market, and creating large new business areas by attracting capital.



It is seen that there is a significant increase in the distribution of per capita income in the GAP region only in the last twenty percent, while there is a decrease in the other segments. According to the Socio-Economic Development Ranking of Provinces and Regions, there has been no progress in the socio-economic development levels in the GAP Region provinces, except Gaziantep Province.



5. Income growth and employment are unstable.

It is seen that the Gross Domestic Product per capita between 2016 and 2021 increased slightly in Gaziantep, Şırnak, and Mardin provinces and decreased in the other 6 provinces. The unemployment rate in the GAP Region has doubled and decreased over the years. This shows that the progress in the GAP region has not been consistent in reducing unemployment continuously. In addition, there has been an increase in employment in the region, but the employment target in the Master plan has fallen behind and the targeted level in agricultural employment has not been reached. Terrorism in the region and the low and irregular amounts of annual public investment allocations to GAP were important factors affecting the project's progress.

6. The distribution of land ownership is unequal.

There is great inequality in the distribution of land ownership in the region. According to TURKSTAT's 2001 General Agriculture Census statistical data, 6% of farmers in the GAP Region are landless. 51% of households own less than 50 decare of land and can only produce for subsistence. This situation not only reduces the rate of utilization of the potential but also prevents the transition to modern agriculture and irrigation techniques due to low income. Due to the dominance of the tribal structure throughout the region, approximately two-thirds of the land is operated by 12.5% of the families. Approximately one-third of the land is operated by 81.5% of the farmers in the region.

7.Conclusions

Achieving the goals announced by the Economy Coordination Board is very important for the region and Türkiye. As the areas opened to irrigation increase in the GAP, the irrigation-development relationship should also be taken into consideration. In this context, studies such as supporting small and medium-sized enterprises that create employment opportunities and reduce the imbalance in income distribution, increasing access to markets, technology, and information should be carried out together. In this context, the perspective on GAP should be renewed and state support for agriculture-based industry should be increased. In addition, practices in various fields such as organic agriculture with new technology, renewable energy projects in modern agricultural irrigation, effective cooperatives, and farmer training should be accelerated and continued. The effectiveness of studies on product planning, marketing, and export relations should be increased.

.Climate change and the new geopolitical situation in the region have greatly increased the strategic and economic importance of GAP. As stated in the plans, it is possible and necessary for the region to become an export base for agriculture and agriculture-based industries. For this, the problems that prevent the agricultural sector from being the driving force of development in the region need to be solved.

GAP, an integrated regional development project planned during the global economic and international relations period of the Cold War, has become a project bordering a region that is being tried to be reshaped politically today. Changes in climate and political developments in the region have expanded the regional benefit limits of GAP. Recent developments in Syria have increased the importance of GAP in economic and strategic terms. GAP is before us as a project that can offer many different opportunities to use the benefits generated from water for the stability of the entire region.



The perspective on GAP should be renewed, and agriculture and industry integration should be ensured. We must protect this project of increasing strategic importance, taking into account the new geopolitical situation in the region, and complete it with a new perspective.

8.References

- [1] YILDIZ D.,DOĞAN H.H. (2025) GAP 2025 Sulama Hedefleri ve Sonuçları Su Politikaları Derneği .Araştırma Dizisi :2 - Şubat 2025.Ankara.
- [2] YILDIZ Ö. (2008) GAP İllerinde Sosyal ve Ekonomik Dönüşüm Ege Akademik Bakış / Ege Academic Review 8 (1) 2008: 287- 300



Dursun Yıldız C.E. (MSc.) is a hydropolitics specialist and Director of the Hydropolitics Academy Association located in Ankara-Turkey.He is a civil engineer and used to be Deputy Director at State Hydraulic Works in Turkey; completed a hydroinformatics post graduate course at the IHE in Delft, a Technical training program in USBR-USA, and a master's degree in Hydropolitics at the Hacettepe University-Turkey. He has over 5 years of teaching experience in some Turkish Universities and now works as head of his own Hydro Energy & Strategy consulting company located in Ankara. He has published several international articles and 15 books. He received the Most Successful Researcher Award on International Water Issues from Turkish Agricultural Association in 2008 and from the Central Union of Irrigation Cooperatives in 2016. He received the Professional Services Award of Excellence from İstanbul Çekmeköy Rotary Club in 2021.

He becomes a part-time lecturer at the IZTECH International Water Resources Department in In the 2020-2021 academic year

March 1 2025